Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

## UTILITY PATENT APPLICATION TRANSMITTAL

| Attorney Docket No. |  | 204552016400                                                                            |   |  |  |  |  |
|---------------------|--|-----------------------------------------------------------------------------------------|---|--|--|--|--|
| First Inventor      |  | Toshiyuki OKUMURA                                                                       |   |  |  |  |  |
| Title               |  | RIDE SEMICONDUCTOR LIGHT EMITTING DEVICE HAVING<br>TUM-WELL STRUCTURE ACTIVE LAYER, AND | 2 |  |  |  |  |

| J                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                             | s                                                                           | EMICONDUCT         | OR LASER LIGI                                                                                      | HT SOURCE DEVI                       | ICE            | <u>_</u>                   |  |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|--------------------|----------------------------------------------------------------------------------------------------|--------------------------------------|----------------|----------------------------|--|--|--|
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | (Only for new nonprovisional applications under 37 CFR 1.53(b))                                                                             | Mail Label No.                                                              |                    |                                                                                                    |                                      |                |                            |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | CERTIFICATE OF HAND DELIVERY                                                                                                                |                                                                             |                    |                                                                                                    |                                      |                |                            |  |  |  |
| Q Proceedings of the correspondence is being hand filed with the United States Patent and Trademark Office in Washington, I                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                             |                                                                             |                    |                                                                                                    |                                      |                |                            |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Sanuary 17, 2002.                                                                                                                           | 0 0 "                                                                       |                    |                                                                                                    |                                      |                | 7                          |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <u> </u>                                                                                                                                    | Verligge                                                                    |                    |                                                                                                    |                                      |                |                            |  |  |  |
| =                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | N. Del                                                                                                                                      | Riggi                                                                       |                    |                                                                                                    |                                      |                |                            |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ASSISTANT Commissioner for Patents  APPLICATION ELEMENTS  APPLICATION ELEMENTS  APPLICATION ELEMENTS  APPLICATION ELEMENTS                  |                                                                             |                    |                                                                                                    |                                      |                |                            |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | APPLICATION ELEMENTS  ADDRESS TO: Box Patent Application Washington, DC 20231                                                               |                                                                             |                    |                                                                                                    |                                      |                |                            |  |  |  |
| $\neg$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1. Fee Transmittal Form (e.g. PTO/SB/17)                                                                                                    | 7. CD-ROM or CD-R in duplicate, large table or Computer                     |                    |                                                                                                    |                                      |                |                            |  |  |  |
| . [                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | (Submit an original, and a duplicate for fee processing) 2. Applicant claims small entity status.                                           |                                                                             |                    | Program (Appendix) Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary) |                                      |                |                            |  |  |  |
| \$115<br>\$115                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | See 37 CFR 1.27.                                                                                                                            | <b>□</b> 1                                                                  | (if                |                                                                                                    |                                      |                |                            |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | (preferred arrangement set forth below)                                                                                                     | , ,                                                                         | а                  |                                                                                                    | r Readable Form (C                   | RF)            |                            |  |  |  |
| 20 TO 10 TO | <ul> <li>Descriptive title of the Invention</li> <li>Cross Reference to Related Applications</li> </ul>                                     |                                                                             | -                  | ecification Seque                                                                                  | nce Listing on:<br>r CD-R (2 copies) | : or           |                            |  |  |  |
| £112<br>₹112<br>£11                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <ul> <li>Statement Regarding Fed sponsored R &amp; D</li> <li>Reference to sequence listing, a table, or a</li> </ul>                       |                                                                             |                    | □ paper                                                                                            | , (                                  | ,,             | •                          |  |  |  |
| \$117                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | computer program listing appendix - Background of the Invention                                                                             |                                                                             | с.                 | ] Statemer                                                                                         | nts verifying identify               | of above co    | pies                       |  |  |  |
| £112                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Brief Summary of the Invention     Brief Description of the Drawings (if filed)                                                             | d)                                                                          |                    | ACCOMPANYING APPLICATION PARTS                                                                     |                                      |                |                            |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Detailed Description     Claim(s)                                                                                                           | 9. 🔲 A                                                                      | ssignment Papers   | (cover sheet & docu                                                                                | ıment(s))                            |                |                            |  |  |  |
| ≹;<br>≥02                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | - Abstract of the Disclosure                                                                                                                |                                                                             |                    | 7 CFR 3.73(b) Sta<br>there there is an assi                                                        |                                      |                | Power of Attorney          |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 4. X Drawing(s) (35 USC 113) [Total Sheets 1                                                                                                | 0 ]                                                                         | —                  |                                                                                                    | document (if applica                 | ible)          |                            |  |  |  |
| 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 5. Oath or Declaration [Total Pages 3                                                                                                       | <b>□</b> }                                                                  |                    | formation Disclose<br>DS)/PTO-1449                                                                 | ure Statement                        |                | Copies of IDS<br>Citations |  |  |  |
| <sup>بال</sup> ا 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | a. Newly executed (original or copy)                                                                                                        |                                                                             | 13. 🗶 Pr           | Preliminary Amendment                                                                              |                                      |                |                            |  |  |  |
| \$112.<br>\$112.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | b. Copy from a prior application (37 CFR 1.63) (for continuation/divisional with Box 18 completed)                                          | 14. Return Receipt Postcard (MPEP 503) Should be specifically itemized)     |                    |                                                                                                    |                                      |                |                            |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | i. DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s)                                                                   | 15. Certified Copy of Priority Document(s) (If foreign priority is claimed) |                    |                                                                                                    |                                      |                |                            |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | prior application, see 37 CFR 1.63(d)(2) and                                                                                                | Request and Certification under 35 U.S.C. 122(b)(2)(B)(i). Applicant        |                    |                                                                                                    |                                      |                |                            |  |  |  |
| ı                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 6. 🗷 Application Data Sheet. See 37 CFR 1.76                                                                                                | must attach form PTO/SB/35 or its equivalent.  17. Other                    |                    |                                                                                                    |                                      |                |                            |  |  |  |
| ŀ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 18. If a CONTINUING APPLICATION, check appropriate box an                                                                                   | d supply the requi                                                          | site information l | below and in a pre                                                                                 | liminary amendment                   | t, or in an Ap | oplication Data Sheet      |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | under 37 CFR 1.76:  □ Continuation  □ Divisional  □ Continuation                                                                            | on-in-part (CIP)                                                            | of prior ap        | plication No: 09/3                                                                                 | 80.537                               |                |                            |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Prior application information: Examiner Gloacchi                                                                                            |                                                                             | Group / Art        |                                                                                                    | <u></u>                              |                |                            |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the                                                                      |                                                                             |                    |                                                                                                    |                                      |                |                            |  |  |  |
| Ĺ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | disclosure of the accompanying continuation or divisional application and is<br>inadvertently omitted from the submitted application parts. | nereby incorporated                                                         | o by reference.    | ils incorporation <u>ca</u>                                                                        | n only be relied upon                | wnen a poruc   | in has been                |  |  |  |
| 19. CORRESPONDENCE ADDRESS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                             |                                                                             |                    |                                                                                                    |                                      |                |                            |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Customer Number or Bar Code Label                                                                                                           | 1188118 11881 811                                                           |                    |                                                                                                    |                                      | orresponder    | nce address below          |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                             |                                                                             |                    |                                                                                                    |                                      |                |                            |  |  |  |
| ļ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                             |                                                                             |                    |                                                                                                    |                                      |                |                            |  |  |  |
| - 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 25227                                                                                                                                       |                                                                             |                    |                                                                                                    |                                      |                |                            |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | PATENT TRADEMARK OFFICE                                                                                                                     |                                                                             |                    |                                                                                                    |                                      |                |                            |  |  |  |
| ŀ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | (Insert Customer No. or Attach bar code label hera)  Name                                                                                   |                                                                             |                    |                                                                                                    |                                      |                |                            |  |  |  |
| İ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Address                                                                                                                                     |                                                                             |                    |                                                                                                    |                                      |                |                            |  |  |  |
| ŀ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                             |                                                                             |                    |                                                                                                    |                                      |                |                            |  |  |  |
| ŀ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | City                                                                                                                                        |                                                                             |                    |                                                                                                    |                                      |                |                            |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                             |                                                                             |                    |                                                                                                    |                                      |                | -                          |  |  |  |
| ŀ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                             |                                                                             |                    |                                                                                                    |                                      |                |                            |  |  |  |
| ļ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Country  Name (Print/Type)  Baffy E Pretschweiger                                                                                           | State<br>Telephone                                                          | ,                  | o. (Attorney/Agent                                                                                 | Fax                                  | ,055           |                            |  |  |  |
| l                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Signature Alfhatelun                                                                                                                        |                                                                             |                    | Date                                                                                               | January 17, 2002                     |                |                            |  |  |  |

## **FEE TRANSMITTAL FOR FY 2002**

Complete if Known **NEW** Application Number Filing Date January 17, 2002 Toshiyuki OKUMURA First Named Inventor Examiner Name not assigned Group Art Unit not assigned

Date

January 17, 2002

Patent fees are subject to annual revision.

**TOTAL AMOUNT OF PAYMENT** (\$740.00 204552016410 Attorney Docket No

| MET                                                   | FEE CALCULATION (continued)             |                        |             |                              |             |                 |                           |                                              |                |          |
|-------------------------------------------------------|-----------------------------------------|------------------------|-------------|------------------------------|-------------|-----------------|---------------------------|----------------------------------------------|----------------|----------|
| 1. X The Commission                                   | 3. ADDITIONAL FEES                      |                        |             |                              |             |                 |                           |                                              |                |          |
| Deposit Control                                       | ny overpayments to:                     |                        | Large       | Entity                       | Small       | Entity          |                           |                                              |                |          |
| Account 03-1952<br>Number                             | 2                                       |                        | Fee<br>Code | Fee<br>(\$)                  | Fee<br>Code | Fee<br>(\$)     | Fee D                     | escription                                   |                | Fee Paid |
| Deposit<br>Account Morriso<br>Name                    | n & Foerster LLP                        |                        | 105         | 130                          | 205         | 65              | Surcha                    | arge - late filing fe                        | ee or oath     |          |
| Charge Any Addition                                   | nal Fee Required Under 37 CFF           | R 1.16 and 1.17        | 127         | 50                           | 227         | 25              |                           | arge - late provisi                          | onal filing    |          |
| Applicant claims small entity status. See 37 CFR 1.27 |                                         |                        |             | 130                          | 139         | 130             |                           | cover sheet<br>nglish specificatio           | on             |          |
| 2. Payment Enclosed:                                  |                                         |                        |             | 2,520                        | 147         | 2,520           |                           | ng a request for e                           | ex parte       |          |
| ☐ Check ☐ Credit Card ☐ Money Order ☐ Other           |                                         |                        |             | 920°                         | 112         | 920°            | Reque                     | sting publication miner action               | of SIR prior   |          |
| FEE CALCULATION                                       |                                         |                        |             | 1,840*                       | 113         | 1,840*          | Reque                     | esting publication<br>ner action             | of SIR after   |          |
| 1. BASIC FILING FEE                                   |                                         |                        | 115         | 110                          | 215         | 55              |                           | sion for reply with                          | in first month |          |
|                                                       |                                         |                        | 116         | 400                          | 216         | 200             | Extens                    | sion for reply with                          | in second      |          |
| Large Entity Small Fee Fee Fee Code (\$) Code         | Entity Fee Fee Description (\$)         | Fee                    | 117         | 920                          | 217         | 460             | Extens                    | sion for reply with                          | in third       |          |
| Code (\$) Code                                        | (*)                                     | Paid                   | 118         | 1,440                        | 218         | 720             | Extens<br>month           | ion for reply with                           | in fourth      |          |
| 101 740 201                                           | 370 Utility filing fee                  |                        | 128         | 1,960                        | 228         | 980             | Extens                    | ion for reply with                           | in fifth month |          |
| 106 330 206                                           | 165 Design filing fee                   |                        | 119         | 320                          | 219         | 160             | Notice                    | of Appeal                                    |                |          |
| 107 510 207                                           | 255 Plant filing fee                    |                        | 120         | 320                          | 220         | 160             |                           | a brief in support                           |                |          |
| 108 740 208                                           | 370 Reissue filing fee                  | *   <u> </u>           | 121         | 280                          | 221         | 140             |                           | st for oral hearing                          |                |          |
| 114 160 214                                           | 80 Provisional filing                   | fee                    | 138         | 1,510                        | 138         | 1,510           | Petitio<br>procee         | n to institute a pu<br>eding                 | iblic use      |          |
|                                                       |                                         |                        | 140         | 110                          | 240         | 55              | Petitio                   | n to revive - unav                           | oidable/       |          |
| ŀ                                                     | SUBTOTAL (1) (                          | \$)740.00              | 141         | 1,280                        | 241         | 640             | Petitio                   | n to revive - unint                          | tentional      |          |
| 2. EXTRA CLAIM FEES                                   |                                         |                        |             | 1,280                        | 242         | 640             | Utility                   | issue fee (or reis                           | sue)           |          |
| ł                                                     | Extra Fee from<br>Claims below          | Fee Paid               | 143         | 460                          | 243         | 230             | Design                    | issue fee                                    |                | 1 1      |
| Total Claims 10 - 20** =                              | 0 x 18                                  | = \$0                  | 144         | 620                          | 244         | 310             | Plant i                   | ssue fee                                     |                |          |
| Independent 2 - 3** = Claims                          | 0 x 84                                  | = \$0                  | 122         | 130                          | 122         | 130             | Petitio                   | ns of the Commis                             | sioner         |          |
| Multiple Dependent = \$                               |                                         |                        | 123         | 50                           | 123         | 50              | applica                   |                                              |                |          |
|                                                       |                                         |                        | 126         | 180                          | 126         | 180             |                           | ssion of Informati<br>sure Stmt              | on             |          |
| Large Entity Small<br>Fee Fee Fee<br>Code (\$) Code   | Entity Fee Fee Description (\$)         |                        | 581         | 40                           | 581         | 40              |                           | ding each patent operties (times nu<br>ties) |                |          |
| 103 18 203                                            | 9 Claims in excess                      | of 20                  | 146         | 740                          | 246         | 370             | rejection                 | a submission afte<br>on<br>R § 1.129(a))     | r final        |          |
| 102 84 202                                            | 42 Independent clair                    | ms in excess of 3      | 149         | 740                          | 249         | 370             |                           | ch additional invened (37 CFR § 1.           |                |          |
| 104 280 204                                           | 140 Multiple depende                    | nt claims, if not paid | 179         | 740                          | 279         | 370             | Reque<br>(RCE)            | st for Continued I                           | Examination    |          |
| 109 84 209                                            | 42 **Reissue indeper<br>original patent | ndent claims over      | 169         | 900                          | 169         | 900             |                           | st for expedited e                           | examination    |          |
| 110 18 210                                            | **Delegue claims in excess of 20 and    |                        |             |                              |             |                 |                           |                                              |                |          |
|                                                       | Other fee                               | (specify)              |             |                              | _           |                 |                           |                                              |                |          |
| ** or number previously paid,                         | *Reduced                                | d by Basic Fili        | ing Fee I   | Paid                         |             | SUBTOTAL        | . (3) (\$)                |                                              |                |          |
| SUBMITTED BY                                          |                                         |                        |             |                              |             | Complete (if ap | pplicable)                |                                              |                |          |
| Name (Print/Type) Barry E. Bretsch <del>ne</del> ider |                                         |                        |             | istration No.<br>rney/Agent) |             | 28,055          | 28,055 Telephone (202) 88 |                                              |                | -1545    |

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